

REMARKS/ARGUMENTS

Claims 1, 2, 5, 7, 8, 14, 16, 18-22, 27 and 28 have been amended to further particularly point out and distinctly claim subject matter regarded as the invention. The text of claims 3, 4, 6, 9-13, 15, 17, 23-26 and 29-33 is unchanged, but their meaning is changed because they depend from amended claims.

Record of Interview

On June 8, 2004, an interview was conducted by telephone between Examiner Lee and Marc S. Hanish, Reg. No. 42,626. Applicant thanks the Examiner for granting this interview. The details of the interview are set forth in the Interview Summary document made of record.

Additionally, Applicant wishes to point out that during the interview Examiner Lee indicated that the Patent Office position was that the term "query" in the claims could be interpreted broadly to include a request for actual content (as is performed in the prior art) as opposed to a request intended to yield transit time information. Applicant has amended the term "query" in the claims to instead read as "transit time request" to resolve this disagreement. Applicant has also amended the specification and figures to reflect this wording change. Applicant maintains that this is inherent in the described invention, in that the queries are being timed so that they all arrive at the content serving sites at the same time, creating a 1-way race condition to the fixed location. Then the following step in the method receives the transit times from the fixed location. Applicant therefore maintains that it is clear that the term "query" as used throughout the patent application was intended to be a transit time request as opposed to a request for actual content from the content serving site.

Emens does not teach any limiting of transit time requests - it sends them to all mirror sites

As to why this amendment overcomes the prior art, Applicant refers the Examiner back to the Amendment filed on April 15th, 2004 for an explanation of why Emens and the other prior art do not teach the phased learning approach of the claimed invention. In addition to the argument provided in that document, Applicant wishes to further point out that the division of available mirror sites into subsets performed by Emens is used for content serving purposes only and NOT used in measuring transit times. Emens, like the prior art described in the background section of the present invention, sends transit time requests to ALL mirror sites, wasting bandwidth and processing power. The selection of subsets of mirror sites acts only to limit the number of mirror sites to which the user will send a content request. There is no teaching or suggestion in the prior art to apply a phased learning approach to the selection of mirror sites to which to send transit time requests as claimed in the present invention.

Emens must be performed at the client computer.

Additionally, there is one last point that was not discussed in either the Interview or the previous Amendment. The preamble of claim 1 indicates that the method is "for using a phased learning approach for determining closest of s multiple content serving sites to a fixed location in a computer network". Then, an element of claim 1 is "receiving data from said fixed location as to the transit times of each of the n fastest content serving sites and m other content serving sites." Thus, the method of claim 1 is obviously NOT performed at the fixed location, yet is attempting to determine which is a closest mirror to the fixed location.

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The transit times in Emens measure transit times from the mirror sites to the client computer, yet it is the client computer itself that is sending the transit time requests. Emens, therefore, cannot teach the element "receiving data from said fixed location..." because Emens necessarily must be performed at the fixed location if it is to comply with the preamble.

Request for Allowance

It is believed that this Amendment places the above-identified patent application into condition for allowance. Early favorable consideration of this Amendment is earnestly solicited.

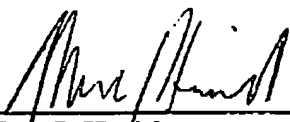
If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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Dated: 6/15/04



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ABSTRACT

In order to direct content requests to an appropriate content serving site in a computer network, a phased learning approach is utilized to ensure that, as best as possible, the request is made to content serving site with the shortest delay. In a setup phase, an indirect path return geographic sever load balancer times sends transit time requests to all of the individual content serving sites so that the transit time requests all arrive at the content serving sites at the same time. Therefore, when the requesting fixed location receives communications from the content serving sites, it can easily tell which content serving site has the least delay by an established race condition. The winner of the race may then be relayed to the indirect path return geographic server load balancer for later usage. In an execution mode, only the m fastest content serving sites and n other sites (used to test random and new sites) are sent a transit time request when a DNS request arrives from the requesting fixed location. The particular m fastest content serving sites and n other sites may be dynamically updated so as to ensure the most reliable directing of requests. This solution provides a very efficient and effective means by which to determine closest content serving sites while keeping load balancer-created traffic at a minimum.

ANNOTATED FIG. 3

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